safe disposal of nuclear waste from power plants and weapon production. **1983** The Chesapeake Bay Agreement signed activities. **1984** Union Carbide plant accident in Bhopal, India releases methyl isocyanate, killing more than 2,000 people. **1985**

CLEAN LAND

From Superfund to Super Parks

There was a time when people didn't think twice about burying their garbage and hazardous wastes wherever and whenever was convenient. Industries buried waste in their own backyards, and for years, communities deposited both trash and toxic waste at the town dump.

The infamous Love Canal provided our nation with a much-needed catalyst for action. Used as an industrial dumping ground since the 1930s, community activists turned a spotlight on this suburban area in upstate New York and it was found to be contaminated by buried, leaking chemical containers, in 1978. It was immediately declared a grave and imminent peril to the health of hundreds of residents.

Proper waste disposal was catapulted to an issue of national significance. With Love Canal as a symbolic poster community, Americans learned the hard and fast way that unchecked dumping of hazardous materials posed serious health risks.

Then came Superfund.

Established in 1980, Superfund empowered EPA to not only protect the environment, but also to clean our nation's worst abandoned hazardous waste sites. Today, hazardous wastes and toxic materials are tracked from production to disposal. The public is informed about the presence and potential danger of all toxic materials in their community, whether it's emitted from a smokestack or stored in a warehouse.

Yet solutions aren't always evident, and the hurdles to cleanup are immense. Industries in the mid-Atlantic states alone generate 50,000 tons of hazardous waste a day. Cities are running out of space to dump their waste and must dispose of it elsewhere.

In 1986, the ship Khian Sea left Philadelphia with 15,000 tons of incinerator ash. Waste that no one wanted. The ship dumped some ash in Haiti and traveled the Atlantic, Pacific and Indian Oceans before arriving — empty— in Singapore. Almost a decade after Love Canal, the Khian Sea incident provided Americans with another staggering reminder of a very valuable yet limited resource — clean land.

Communities realize that the concept of environmental protection extends far beyond waste removal. The Superfund and companion hazardous waste management programs go a step further, finding creative solutions to solving the nation's shrinking landfill space and developing waste management alternatives like land recycling, reuse and waste reduction.

Looking back over the past 20 years, EPA's Superfund accomplishments are substantial. While not without its problems, Superfund has cleaned up

outlining cleanup actions to rid the Bay of water pollution from sewage treatment plants, urban runoff and agricultural

Union Carbide plant at Institute, W.Va., releases methyl isocyanate, bringing home the concept that communities in the U. S.

more than 675 of the nation's most serious uncontrolled or abandoned hazardous waste sites with 85 more completions expected by the close of 2000.

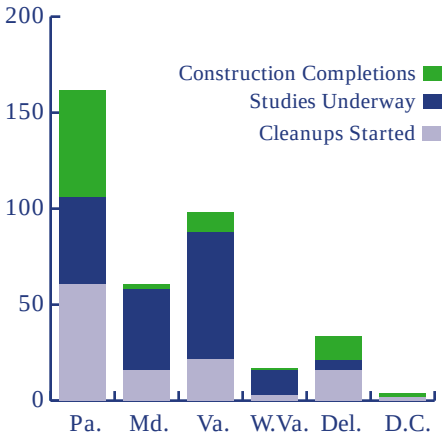
In the past seven years alone, EPA has built a better Superfund through comprehensive administrative reforms. During this time, Superfund has completed construction at three times as many sites as in the previous 13 years combined. The program's emphasis on involving communities, state partners and local governments has been an integral facet to this surge in construction completions.

There is a financial chapter to the Superfund success story. The program uses innovative agreements with responsible parties to result in faster, more cost-effective settlements. These settlements, in turn, conserve the Superfund Trust Fund for use at sites without capable and willing responsible parties.

Courtesy of Region III Superfund Program

In Anacostia, a Washington D.C. neighborhood, the "Day on the River Program" not only provides recreational access to the river, it gives children in the community an opportunity to make new friends while enjoying a piece of nature in the city.

Superfund Progress in Region III Since 1983



So far, responsible parties have paid 70 percent of the cleanup costs, saving U.S. taxpayers billions of dollars. Since 1982, the mid-Atlantic region has cleaned up 83 sites, and using innovative technologies, changed 40 cleanup decisions to accelerate construction time and save more than $100 million.

Where the responsible party has been defunct or financially insolvent, the region bridged the funding gap with $26.6 million at 12 "orphan" sites.

At 23 sites, the agency reached settlements with hundreds of minor defendants saving them and the agency millions in legal costs and unnecessary litigation.

Restoring and Reusing the Land

EPA's mid-Atlantic success stories speak volumes about the region's emphasis on comprehensive and timely cleanups. For example, the mid-Atlantic region deleted one of the first sites ever from the National Priorities List of most hazardous and abandoned waste sites. Based in Lackawanna County, Pennsylvania, the Lehigh Electric & Engineering site's dangerously high concentrations of PCBs once threatened nearby residents. Thanks to Superfund, local residents now rest assured that the site is not only clean, but that their families are safe.

Dedication to cleaning the environment and restoring economic vitality back to affected communities is a driving force behind EPA's success. In 1997, the mid-Atlantic region completed the nation's 500th Superfund cleanup at the former Publicker Industries on the Philadelphia waterfront.

Hailed as a redevelopment milestone, Publicker was once severely contaminated with laboratory wastes, flammable gas cylinders, VOCs and PCBs. Today it is being redeveloped as a shipping terminal that will create 1,500 new jobs. Nationally, more than 150 Superfund sites have been put back to productive use, support 11,000 jobs, generate revenues for states and local

are at risk from chemical releases. British scientists report a giant "hole" in the ozone layer is opening up each spring over the Chernobyl nuclear power plant in the former Soviet Union, resulting in the worst accidental release of radioactive materials in

Courtesy of Region III Superfund Program

Superfund clean-up underway. Once Superfund sites are cleaned, the land can then be redeveloped into wildlife preserves, nature refuges, industrial parks, and community spaces including golf courses.

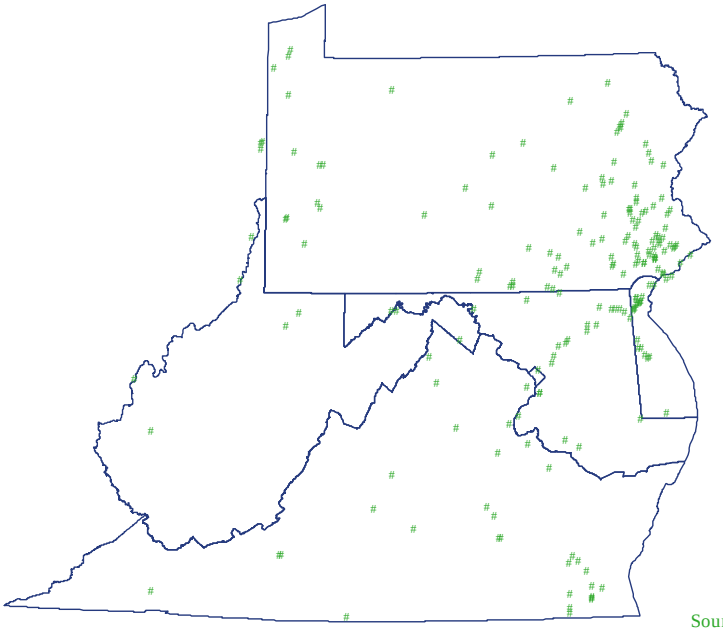
communities, while creating 13,000 acres of new recreational and beneficial green space.

Soccer and softball fields now occupy almost 30 acres where fly ash was disposed at Chisman Creek in York County, Virginia. Once a blight to the local community, groundwater at the site was highly contaminated, threatening nearby estuaries. EPA took action, partnering with state and local governments, community members, and responsible parties to develop sound cleanup solutions resulting in a sports park that is widely enjoyed today.

Chosen as one of the 10 Superfund recycling pilot programs in the country, the former Avtex Fibers plant in Front Royal, Virginia will provide the community with a recreation and wildlife conservancy, soccer fields and a business park-office. In addition to nearly $20 million spent on cleanup by a responsible party, that party has reimbursed EPA $9.1 million and agreed to perform the remaining cleanup estimated at $63 million and pay EPA a portion of its oversight cost.

Other regional reuse projects include the Ohio River Park near Pittsburgh, redeveloped into a multi-million dollar sports complex; Mill Creek Landfill in Erie, Pennsylvania will be a golf course; the Kane & Lombard Drums site in Baltimore has reopened as a golf driving range; and the Army Creek Landfill in New Castle, Delaware was restored to a nature and wildlife preserve. Once desolate eyesores, Superfund has helped transform these sites into vital, attractive and productive assets of communities across the nation.

Location of Superfund Sites in Region III



Source: EPA

Antarctic. 1986 Congress increases Superfund to $8.5 billion, creates mechanisms to speed cleanups. Reactor explodes at the history. Thousands die, 450,000 are evacuated within a 30-square-kilometer area. 1987 Clean Water Act sets state water